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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,514	10/25/2001	Rebecca Ann Frana-Guthrie	0212-0001	1677

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EXAMINER	
CIRIC, LJILJANA V	
ART UNIT	**PAPER NUMBER**
3753	

DATE MAILED: 10/29/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)
10/053,514	Frana-Guthrie et al.
Examiner	**Art Unit**
Ljiljana V. Ciric	3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Jul 2, 2003 and Aug 15, 2003* .

2a) ☒ This action is **FINAL.** 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-13* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on *Oct 25, 2001* is/are a) ☐ accepted or b) ☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☒ The proposed drawing correction filed on *Jul 11, 2003* is: a) ☐ approved b) ☒ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Response to Amendment

1. This is in response to the amendments and arguments filed on July 2, 2003 and on August 15, 2003.

2. Claims 1 through 13 remain in the application, of which claims 1 through 8 have been amended and claims 9 through 13 are new.

Response to Arguments

3. Applicant's arguments filed on July 2, 2003 and on August 15, 2003 have been fully considered but they are not persuasive.

While applicant has amended claim 7 in an attempt to obviate the previously cited rejection of the claim under 35 U.S.C. 112, second paragraph, the limitation "*the step of connecting* the radiator to the charge air cooler *is releasable*" is still indefinite as written as noted in greater detail below.

As a preface to the following traversal of applicant's arguments with regard to the previously cited rejection of claims 1 and 2 based on the *Williams* and *Hedeen* references, respectively, the examiner hereby notes that the claims in a pending application should be given their *broadest* reasonable interpretation. See In re Person, 181 USPQ 641 (CCPA 1974). Applicant's arguments appear to be based on an overly narrow interpretation of the pending claims, and furthermore fail to specify which particular limitation or limitations are not disclosed

by the aforementioned references. Thus, the examiner holds that all of the limitations recited in claims 1 and 2 are anticipated by the *Williams* and *Hedeen* references as outlined in detail below.

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

Applicant's arguments with respect to claims 3 through 9 have been considered but are moot in view of the new ground(s) of rejection.

Drawings

4. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on July 11, 2003 have been disapproved because they introduce new matter into the drawings. 37 CFR 1.121(a)(6) states that no amendment may introduce new matter into the disclosure of an application. The original disclosure does not support the showing of reference character 42 corresponding to the sealing flange as being associated with the particular elements in Figures 1 and 3 to which the reference lines associated with reference character 42 point in newly filed Figures 1 and 3, thus constituting new matter. [NOTE: Due to information and disclosure gaps in the originally filed disclosure (originally filed specification and originally filed drawings), it is not

clear at all which element(s) in each of Figures 1 and 3 do correspond to the sealing flange to which reference character 42 is assigned.]

5. The drawings filed on October 25, 2001 are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the following features must be shown or the feature(s) canceled from the claim(s): a seal between the subassembly face and the flange as recited in claims 3 and 6 and all claims depending therefrom; the seal between the subassembly face and the flange comprising foam between the subassembly face and the flange as recited in claims 5 and 8; and, the seal between the face of the subassembly and the flange being a metal-to-metal seal as recited in claim 12. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

6. The drawings filed on October 25, 2001 are objected to because four reference signs, including reference signs 70, 72, 74, and 76, all appear to be pointing towards a single element in Figure 4. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

7. The drawings filed on October 25, 2001 are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference signs mentioned in the

description: reference sign 42 corresponding to the sealing flange as cited on page 4, line 18 and on page 7, line 23; reference sign 50 corresponding to the downstream face of the radiator as cited on page 5, line 3; reference sign 60 corresponding to the downstream face of the charge air cooler as cited on page 5, line 11; reference sign 104 corresponding to the gaps cited on page 7, line 18; and reference sign 118 corresponding to a surface of flange 42 as cited on page 8, line 30. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

8. Receipt and entry of the amended abstract is hereby acknowledged.

Claim Objections

9. Claims 1 through 13 are objected to because of the following informalities, for example: the limitations "for mounting *in a path of environmental air flowing in a direction of air flow*" [claim 1, lines 1-2; claim 3, lines 1-2; claim 6, lines 1-2] are redundant, unclear, and grammatically incorrect as written. Appropriate correction is required.

Claim Rejections - 35 U.S.C. § 112

10. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

11. Claims 3 through 8 and 11 through 13 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to

reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 3 through 8 as amended and new claims 11 through 13 recite the cooling package comprising a seal between the subassembly face and the flange of the cooling package and also recite the method of manufacturing the cooling package as including the step of sealing the subassembly face against the flange of the cooling package, whereas the originally filed disclosure only provides sufficient support for there being a seal between *the perimeter* of the subassembly face and the flange of the cooling package and for the associated manufacturing method as including the step of sealing *the perimeter* of the subassembly face against the flange of the cooling package as newly recited in base claims 3 and 6, respectively. Similarly, whereas the originally filed disclosure provides support for the flange comprising foam between the perimeter of the subassembly face and the flange of the cooling package, there is insufficient support in the originally filed disclosure for the flange comprising foam between the subassembly face and the flange of the cooling package as newly recited in claim 5 and also for the step of attaching strips of foam to the flange of the subassembly in order to ensure a positive seal between the subassembly face and the flange as newly recited in claim 8. Finally, there is insufficient support in the originally filed disclosure for there being a metal-to-metal seal between the face of the subassembly and the flange as newly recited in claim 12. Thus, the aforementioned newly recited limitations represent new matter in the claims.

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. More specifically, the limitation "*the step of connecting* the radiator to the charge air cooler *is releasable*" is not clear as written. In particular, it is not clear what exactly is encompassed by a *releasable* step of connecting as recited in the claim.

14. Claims 3 through 8 and 11 through 13 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Evidence that claims 3 through 8 and 11 through 13 fail(s) to correspond in scope with that which applicant(s) regard as the invention can be found in the originally filed disclosure, Paper No. 1, filed on October 25, 2001. In that paper, applicant has stated, for example: "the flange provides a perimeter seal around the perimeter of the subassembly face so that no leak paths exist around the subassembly" [page 3, lines 17-18]; and, "although a metal to metal seal can be formed around perimeter 28 of upstream subassembly face 26, it is preferable to place foam 116 onto flange 42 so that foam 116 is between perimeter 28 and flange 42 in order to ensure a good and effective seal between the perimeter of upstream subassembly face 26 and flange 42" [page 8, lines 8-11]. These statements indicates that the invention is different from what is defined in the claim(s) because these statements clearly indicate that the scope of applicant's invention with regard to the seal is such that the seal (which may be metal-to-metal) between the subassembly and the flange is necessarily between *the perimeter* of the subassembly face and the flange and not between just any part of the subassembly face and the flange.

Claim Rejections - 35 U.S.C. § 102

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

16. Claims 1 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by *Williams ('727, of record).*

Williams discloses a vehicular cooling package essentially as claimed, including: a radiator 44 and a charge air cooler 60, wherein one side of the radiator 44 is connected to one side of the charge air cooler 60 to form a subassembly [see Figure 3] and a seal, each of the radiator 44 and the charge air cooler 60 having a face directed into the direction of airflow [the direction of airflow being as shown by the arrows in Figure 3], the face of the radiator 44 furthermore being aligned with (i.e., parallel to) the face of the charge air cooler 60.

The reference thus reads on the claims.

17. Alternately for claims 1 and 9, claims 1, 2, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by *Hedeen (of record).*

Hedeen discloses a vehicular cooling package essentially as claimed, including: a radiator 40 and a charge air cooler 38, wherein each side of the radiator 40 is connected to each side of the charge air cooler 38 [see Figure 3] via a seal formed between respective flanges or

"extended lips" using connectors or bolts 76 [see column 4, lines 1-8] in order to form a subassembly or integrated heat exchanger 34. The respective flow faces of the radiator 40 and the charge air cooler 38 are directed into (and aligned with each other in) the air flow direction as shown in Figure 2.

The reference thus reads on the claims.

18. As best can be understood in view of the indefiniteness of some of the claims as noted in greater detail above and alternately for claims 1, 2, and 9, claims 1 through 4, 6, 7, 9, 11, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by *Struss et al.*

Struss et al. discloses a cooling package essentially as claimed, including: a fan shroud 10 having walls that define an opening, the fan shroud 10 being readable on the frame as recited in the claims of the instant invention; a securing bars 20 attached to the inner surfaces of the walls of the fan shroud 10, the securing bars 20 being readable on the flange as recited in the claims of the instant invention; two heat exchangers or coolers 12 and 14 aligned in a side-by-side fashion with each other and sealed to one another along a side to form a subassembly mounted in the opening of the frame or fan shroud 10 [see Figures 1 and 2 especially], each of the heat exchangers or coolers 12 and 14 having a face directed into the direction of air flow, the heat exchangers 12 and 14 being broadly readable on the radiator and the charge air cooler, respectively, as required.

The reference thus reads on the claims.

Claim Rejections - 35 U.S.C. § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

20. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Williams ('727, of record)*.

As noted in greater detail above, *Williams* discloses a vehicular cooling package essentially as claimed, including a seal between a side of the radiator 40 and a side of the charge air cooler 38 [see Figure 3].

While *Williams* does not necessarily disclose the radiator 40 and the charge air cooler 38 as being made of metal and thus forming a metal-to-metal seal therebetween, Official Notice is hereby taken that it is notoriously well-known in the heat exchanger art to make heat exchangers and heat exchanger parts from heat conductive metals.

Thus, it would have been obvious to one skilled in the art at the time of invention to modify the vehicular cooling package of *Williams* by making the radiator 40 and the charge air cooler 38 from selected metallic materials in order to enhance the heat transfer rate therethrough due to the generally higher relative thermal conductivity of metals; if the radiator 40 and the

charge air cooler 38 are made from metals, then the seal formed between the walls of the radiator 40 and the charge air cooler 38 becomes a metal-to-metal seal.

21. The non-application of art against claims 5, 8, and 12 should *not* be construed as an indication that the claims contain allowable subject matter but rather that the patentability of the claims cannot be determined at this time due to indefiniteness and/or other problems under 35 U.S.C. 112, first and second paragraphs.

Conclusion

22. The following additional prior art made of record and not relied upon is considered pertinent to applicant's disclosure. *Sheidler et al.* is the patent which issued from U.S. Application No. 10/053,515 which incorporated by reference in the instant application. *Deere & Company* corresponds to the EPO filing of the instant application. *Pratt et al., Christensen, Ghiani, Gallivan et al.,* and *Wooldridge* each discloses an assembly of at least two vehicular heat exchangers either integrally formed together or otherwise mounted adjacent one another.

23. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ljiljana (Lil) V. Ciric, whose telephone number is (703) 308-3925.

While she works a flexible schedule that varies from day to day and from week to week, Examiner Ciric may generally be reached at the Office during the work week between the hours of 10 a.m. and 6 p.m. ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel, can be reached on (703) 308-1272.

The NEW central official fax phone number is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0861.

lvc

October 26, 2003

LJILJANA V. CIRIC
PRIMARY EXAMINER
ART UNIT 3753